

NEW ABSTRACT

An ultrasonic image processing system is provided for processing images in an image sequence representing a segment of artery explored along its longitudinal axis. The artery segment show moving walls and the system includes an acquisition device for acquiring an ultrasonic image sequence of a segment of artery explored along its longitudinal axis and having walls moving in relation with the cardiac cycle; a semi-automatic detector for detecting the artery walls in an image of the sequence; and an automatic rigid tracker for tracking the corresponding artery walls in other images of the sequence. An evaluator evaluates the artery wall motion and distensibility; and the images together with together with parameters that include the distensibility are visualized, where the distensibility is a ratio of dilation by a diameter of the artery.